

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see remarks, filed 9/13/2010, with respect to the rejection(s) of claim(s) 1-9 under Yousef have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Lennen in view of Pon.

### *Examiner's Note Regarding Examiner Initiated Interview*

2. The Examiner thanks the Applicant for the interview conducted 11/19/2010, wherein proposed examiner's amendments were discussed. However in light of the further language adjustments and newly found prior art, the language adjustments discussed during the interview are now presented as claim objections below.

### *Claim Objections*

3. Claims 1-9 are objected to because of the following informalities:

-In claim 1, line 3; please change '**an radio**' to "**a radio**"

-In claim 1, line 7; please change '**said receiver**' to "**said RNSS satellite radio navigation receiver**"

-Claims 1 and 9 lacks a transitional phase (comprising, consisting of, etc.) to properly link the preamble and further limitations.

-Claims 1 and 9 end with the limitation 'peaks of each of said functions.'; 'said functions' needs to be expanded to specifically state which functions are being compared.

Art Unit: 2611

-In claim 9, line 3; please change '**an radio**' to "**a radio**"

-In claim 9, line 7; please change '**said receiver**' to "**said RNSS satellite radio navigation receiver**"

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. **Claims 1, 2, 4, 5 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lennen (US Patent 5,818,539, see IDS) in view of Pon et al. (herein after Pon) (US Patent 5963601).**

Re claims 1 and 9, Lennen discloses a method and device of validating the detection of a correlation peak between: a signal transmitted by a plurality of navigation satellites (Col. 1 lines 20-28) and received by an radio navigation satellite system (RNSS) satellite radio navigation receiver (Col. 1 lines 20-28), said signal corresponding to a sum of signals each sent by a satellite and each modulated by a spread spectrum signal characteristic of said satellite (Figure 11 element 22; Col. 2 lines 25-28; Col. 5 lines 2-15), a local replica generated by said receiver (Col. 2 lines 25-32), said replica being the replica of a spread spectrum signal characteristic of a satellite that is being looked for (Col. 2 lines 25-32; Figure 11 element 28), said method including a step of determining the correlation function as a function of time between said received signal and said local replica (Figure 11 element 30; Col. 2 lines 25-45, also lines 53-60), but

Art Unit: 2611

fails to explicitly disclose where said method being characterized in that it further includes a step of comparing said correlation function with the theoretical autocorrelation function as a function of time of said spread spectrum signal characteristic of said satellite that is being looked for over the whole of the vector of the correlation function wherein comparing said correlation function with the theoretical autocorrelation function includes a step of comparing secondary peaks of each of said functions.

This method and device design is however disclosed by Pon. Pon discloses where said method being characterized in that it further includes a step of comparing said correlation function with the theoretical autocorrelation function as a function of time of said spread spectrum signal characteristic of said satellite that is being looked for over the whole of the vector of the correlation function (Figs 1a,b and 2a-d; Col. 2 line 11-Col. 3 lines 39) wherein comparing said correlation function with the theoretical autocorrelation function includes a step of comparing secondary peaks of each of said functions (Figs 1a,b and 2a-d; Col. 2 line 11-Col. 3 lines 39; depicts the main and side peaks, and comparison of such).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the disclosure of Lennen in order to incorporate the multipath condition processing provided by the disclosure of Pon in order to incorporate the full vector comparison and processing in order to allow for accurate positioning validation.

Re Claim 2, the combined disclosure of Lennen and Pon as a whole discloses the validation method according to claim 1, Lennen further characterized in that it includes a step of determining said theoretical autocorrelation function as a function of time of said spread spectrum signal characteristic of said satellite that is being looked for (Figure 10 and associated disclosure; Col. 2 lines 6-24).

Re Claim 4, the combined disclosure of Lennen and Pon as a whole discloses the validation method according to claim 1, Pon further discloses that said comparison step includes a step of calculating the correlation between said correlation function and said autocorrelation function (Col. 2 line 11-Col. 3 lines 39).

Re Claim 5, the combined disclosure of Lennen and Pon as a whole discloses the validation method according to claim 1, Lennen further that said spread spectrum signal is a signal modulating said signal with a known pseudorandom sequence replacing each bit of said signal (Col. 2 lines 25-28; the use of spread spectrum inherently implies the use of pseudo random sequencing in order to control the spreading pattern across a given bandwidth to one of ordinary skill in the art).

#### ***Allowable Subject Matter***

6. Claims 6-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2611

7. As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

8. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record fails to anticipate or render obvious the limitations involving the intercorrelation function.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. NEFF whose telephone number is (571)270-1848. The examiner can normally be reached on Monday - Friday 8:00am - 4:30pm EST ALT Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shuwang Liu can be reached on (571)272-3036. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MICHAEL R. NEFF/  
Examiner, Art Unit 2611  
/Shuwang Liu/  
Supervisory Patent Examiner, Art Unit 2611